GROUP 21A

CLUTCH

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GENERAL INFORMATION

M1211000100375

The clutch is a dry single-disc, diaphragm type; hydraulic pressure is used for the clutch control. The clutch shares a brake fluid reservoir with the brake system.

SERVICE SPECIFICATIONS

M1211000300551

Item	Standard value
Clutch pedal lateral play mm	4 or less
Clutch pedal height mm	100 –104
Distance between the clutch pedal and the pedal stopper when the clutch pedal is released mm	13.5 or more

LUBRICANTS

M1211000400332

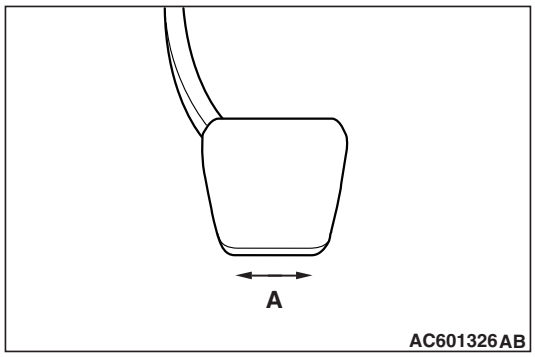
Item	Specified lubricant	Quantity
Clutch fluid	Brake Fluid DOT 3 or DOT 4	As required

ON-VEHICLE SERVICE

CLUTCH PEDAL CHECK AND ADJUSTMENT

M1211000900586

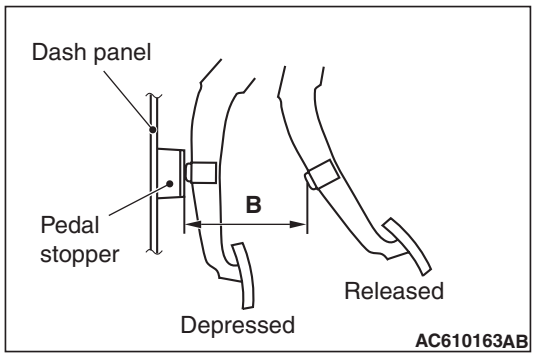
NOTE: This clutch pedal assembly is unadjustable because of its structure.

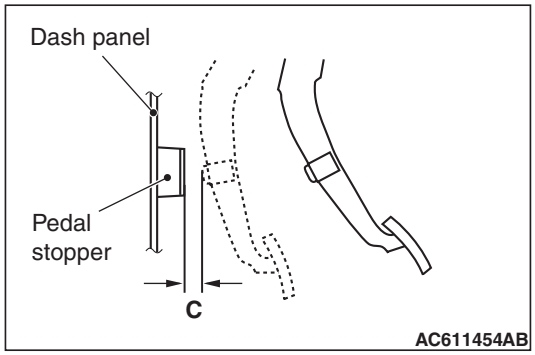


1. Measure the clutch pedal looseness (A).

   Standard value (A): 4 mm (0.16 inch) or less

2. When the clutch pedal looseness is not within the standard value, the clutch pedal assembly may be faulty. In this case, check the clutch pedal assembly, and replace it if necessary.





3. Check that the clutch pedal height (B) and the clearance (C) between the clutch pedal and the pedal stopper when the clutch is disengaged are within the standard value.

   Standard value (B): 101 –104 mm (3.98 –4.09 inch)
   Standard value (C): 13.5 mm (0.53 inch) or more

4. When the clutch pedal height and the clearance between the clutch pedal and pedal stopper when the clutch is disengaged are not within the standard value, air may enter the hydraulic system, or either the clutch master cylinder or the clutch release cylinder may be faulty. In this case, perform air bleeding, or check the clutch master cylinder or the clutch release cylinder, and replace it if necessary.

CLUTCH BLEEDING

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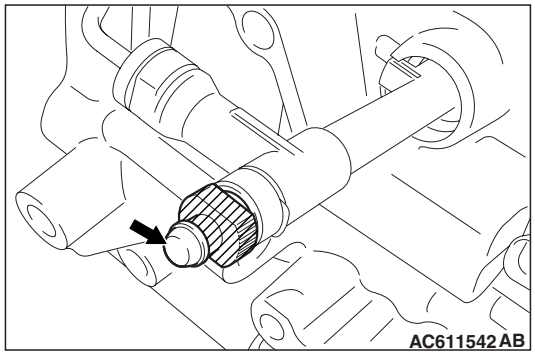
⚠ CAUTION

Use the specified brake fluid. Do not mix brake fluids.

Specified fluid: Brake fluid DOT 3 or DOT 4



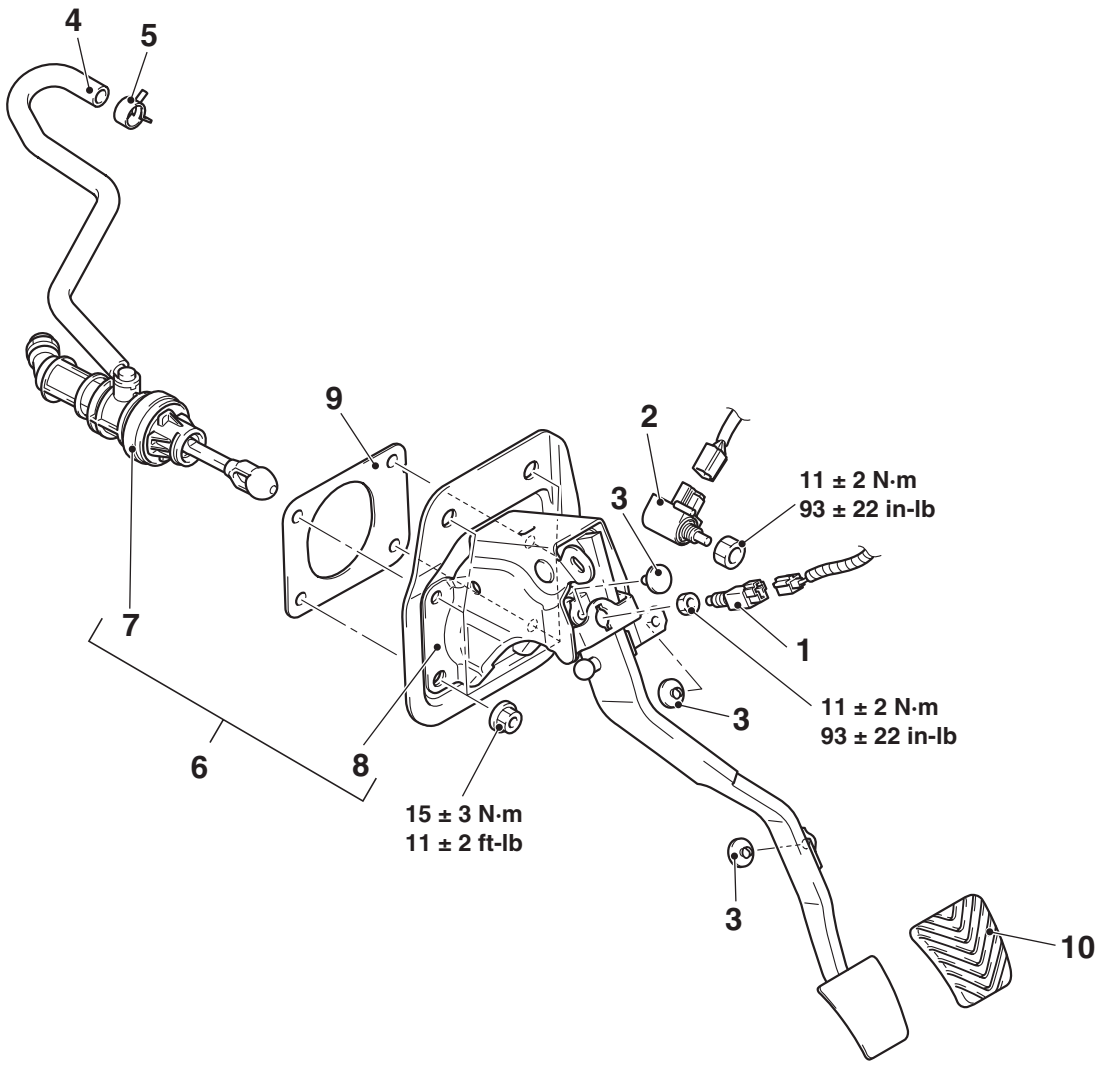
1. Connect a hose with a bottle to the bleeder screw.
2. Turn the nipple (the shaded area in the figure) counterclockwise to release it. (It can be turned only 180°)
3. Depress the clutch pedal slowly. Open the bleeder screw to let air and brake fluid out. Close the bleeder screw. Release the clutch pedal. Repeat until only brake fluid and no air comes out.
4. Check that the brake fluid reservoir level stays between "MAX" and "MIN" marks throughout the clutch bleeding process.

CLUTCH PEDAL AND MASTER CYLINDER

REMOVAL AND INSTALLATION

M1211005200010

Pre-removal Operation	Post-installation Operation
• Instrument panel under cover (Refer to GROUP 52A, Instrument panel P.52A-2). • Knee air bag module (Refer to GROUP 52B, Knee air bag module P.52B-378). • ETACS-ECU (Refer to GROUP 54A, P.54A-564). • Air cleaner cover (Refer to GROUP 15, Air cleanerP.15-4).	• Instrument panel under cover (Refer to GROUP 52A, Instrument panel P.52A-2). • Knee air bag module (Refer to GROUP 52B, Knee air bag module P.52B-378). • ETACS-ECU (Refer to GROUP 54A, P.54A-564). • Air cleaner cover (Refer to GROUP 15, Air cleanerP.15-4). • Clutch Line Bleeding (Refer to P.21A-3). • Clutch Pedal Adjustment (Refer to P.21A-2).



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Removal steps

>>**A**<< 1. Clutch switch
>>**B**<< 2. Clutch interlock switch
3. Stopper
4. Reservoir hose and brake fluid reservoir connection
5. Hose clip

<<**A**>>

Removal steps (Continued)

6. Clucth master cylinder and clutch pedal assembly
7. Clutch master cylinder
8. Clutch pedal assembly
9. Sealer
10. Pedal pad

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REMOVAL SERVICE POINT

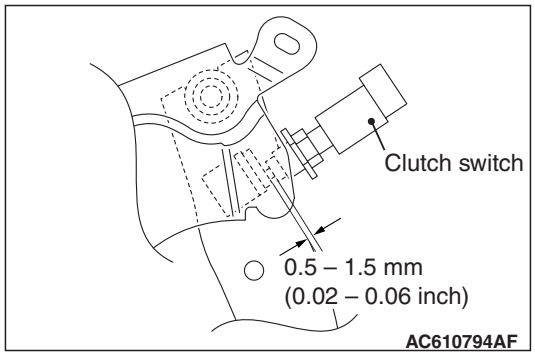
<<A>> CLUTCH MASTER CYLINDER AND CLUTCH PEDAL ASSEMBLY REMOVAL

Remove the clutch master cylinder and clutch pedal assembly from inside the vehicle.

INSTALLATION SERVICE POINT

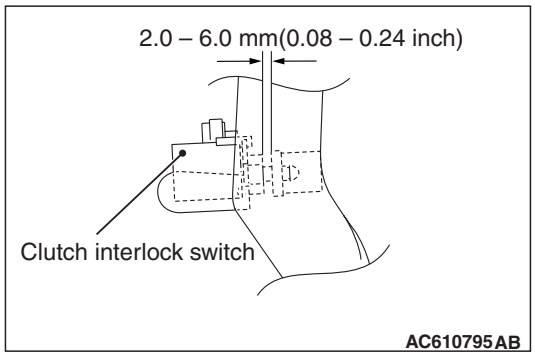
>>A<< CLUTCH SWITCH INSTALLATION

Install the clutch switch at the specified dimension when the clutch pedal is released.



>>B << CLUTCH INTERLOCK SWITCH INSTALLATION

Install the clutch interlock switch at the specified dimension when the clutch pedal is released.



INSPECTION

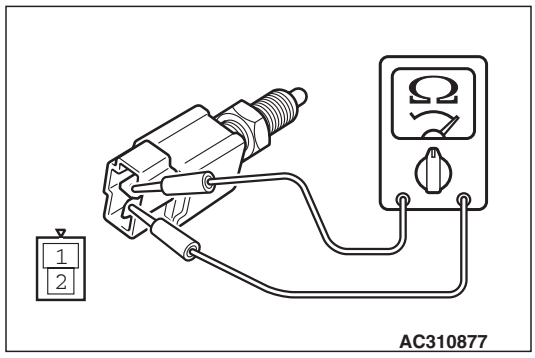
M1211005400014

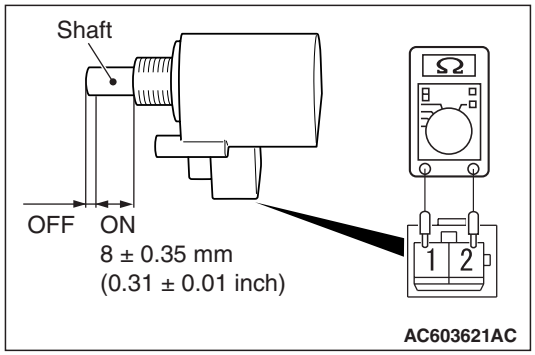
CLUTCH SWITCH CHECK AND ADJUSTMENT

1. Adjust the clutch pedal.
2. Connect an ohmmeter to the clutch switch connector, and then check for continuity when the clutch pedal is fully depressed and when it is released outward.

Tester connection	Pedal position	Specified condition
1-2	Fully depressed	Less than 2 Ω
	Released	Open circuit

3. If the continuity is incorrect, replace the clutch switch.





Clutch interlock switch continuity check

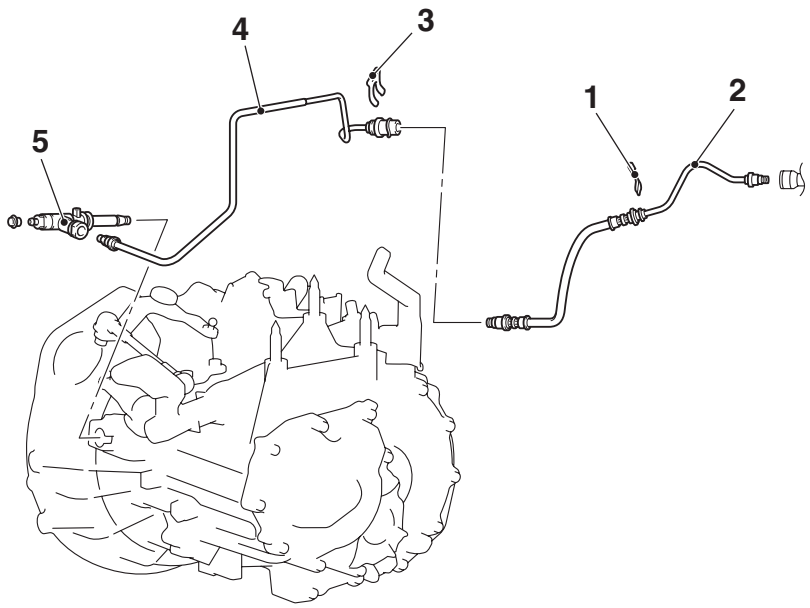
If continuity exists (2Ω or less) when the shaft is pressed to the value shown in the figure or more, and continuity does not exist when the shaft is released, the clutch interlock switch is in good condition.

CLUTCH CONTROL

REMOVAL AND INSTALLATION

M1211001900631

Pre-removal Operation	Post-installation Operation
• Clutch Fluid Draining	• Clutch Fluid Supplying • Clutch Line Bleeding (Refer to P.21A-3). • Clutch Pedal Adjustment (Refer to P.21A-2).



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Clutch line removal steps

1. Hose clip A
2. Clutch tube assembly A
3. Hose clip A
4. Clutch tube assembly B

Concentric slave cylinder removal steps

- Transaxle assembly (Refer to GROUP 22A, Transaxle assembly P.22A-12).

<<A>> >>A<< 5. Concentric slave cylinder adapter

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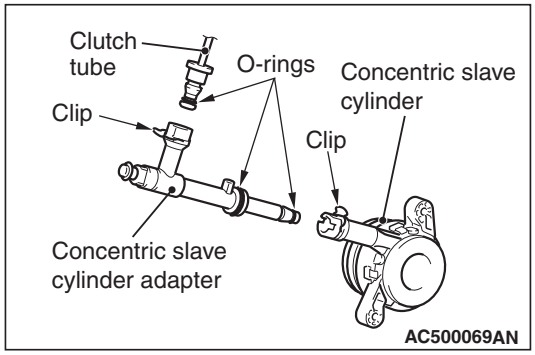
REMOVAL SERVICE POINT

<<A>> CLUTCH TUBE CONNECTION/CONCENTRIC SLAVE CYLINDER ADAPTER REMOVAL

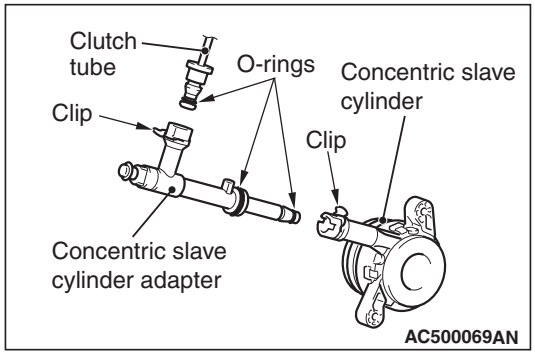


⚠ CAUTION

- **Do not remove the O-rings and the clips from the clutch tube, the concentric slave cylinder adapter and the concentric slave cylinder.**
- **If the O-rings or the clips of the clutch tube, the concentric slave cylinder adapter and the concentric slave cylinder are damaged, replace each assembly.**

INSATALLATION SERVICE POINT

>>A<< CONCENTRIC SLAVE CYLINDER ADAPTER/CLUTCH TUBE CONNECTION INSTALLATION



⚠ CAUTION

- **Check that the O-rings and the clips are not damaged before installing the clutch tube, the concentric slave cylinder adapter and the concentric slave cylinder.**
- **If the O-rings of the clutch tube, the concentric slave cylinder adapter and the concentric slave cylinder and their installation positions are contaminated, clean with the clutch fluid before installation.**

INSPECTION

M1211002000277

- Check the master cylinder or clutch hose for fluid leakage.
- Check the clutch hose or tube for cracks or clogging.

NOTES